Packaging Stewardship Forum of the Australian Food and Grocery Council

Australian Beverage Packaging Consumption, Recovery and Recycling Quantification Study

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### Appendix A

Beverage Packaging Flowcharts
1 Executive summary

The Packaging Stewardship Forum of the Australian Food and Grocery Council engaged Hyder Consulting to quantify beverage packaging consumption, recovery and recycling in Australia for glass, aluminium and PET.

Tables 1 – 1, 1 – 2, 1 – 3 and Table 1-4 present the consumption splits, recovery rates, recycling rates and summary findings of the quantification study.

<table>
<thead>
<tr>
<th>Container type</th>
<th>Residential consumption</th>
<th>Away from Home consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass beverage</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>Aluminium beverage</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>PET beverage</td>
<td>55%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Table 1-2: Residential and Away from Home recovery rates

<table>
<thead>
<tr>
<th>Container Type</th>
<th>Residential recovery rate</th>
<th>Away from Home recovery rate</th>
<th>Overall recovery rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass beverage</td>
<td>76%</td>
<td>22%</td>
<td>62%</td>
</tr>
<tr>
<td>Aluminium beverage</td>
<td>85%</td>
<td>32%</td>
<td>72%</td>
</tr>
<tr>
<td>PET beverage</td>
<td>75%</td>
<td>18%</td>
<td>50%</td>
</tr>
</tbody>
</table>

The overall beverage container recovery rate is 62%.

Table 1-3: Residential and Away from Home recycling rates

<table>
<thead>
<tr>
<th>Container Type</th>
<th>Residential recycling rate</th>
<th>Away from Home recycling rate</th>
<th>Overall recycling rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass beverage</td>
<td>56%</td>
<td>17%</td>
<td>46%</td>
</tr>
<tr>
<td>Aluminium beverage</td>
<td>83%</td>
<td>31%</td>
<td>70%</td>
</tr>
<tr>
<td>PET beverage</td>
<td>69%</td>
<td>17%</td>
<td>46%</td>
</tr>
</tbody>
</table>

The overall beverage container recycling rate is 47%.
Table 1-4: Beverage packaging consumption, recovery and recycling summary

<table>
<thead>
<tr>
<th></th>
<th>Glass</th>
<th>Aluminium</th>
<th>PET</th>
<th>Total</th>
<th>Un-recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumption (tonnes)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>589,400</td>
<td>36,593</td>
<td>48,475</td>
<td>674,469</td>
<td></td>
</tr>
<tr>
<td>Away from Home</td>
<td>196,467</td>
<td>12,198</td>
<td>39,662</td>
<td>248,326</td>
<td></td>
</tr>
<tr>
<td><strong>Recovery (tonnes)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>447,944</td>
<td>31,104</td>
<td>36,409</td>
<td>515,457</td>
<td></td>
</tr>
<tr>
<td>Away from Home</td>
<td>43,222</td>
<td>3,882</td>
<td>7,261</td>
<td>54,365</td>
<td></td>
</tr>
<tr>
<td><strong>Recycling volume</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>328,017</td>
<td>30,494</td>
<td>33,662</td>
<td>392,173</td>
<td>282,296</td>
</tr>
<tr>
<td>Away from Home</td>
<td>33,399</td>
<td>3,806</td>
<td>6,915</td>
<td>44,121</td>
<td>204,206</td>
</tr>
</tbody>
</table>

The following data sources were reviewed for the study:

- PACIA: 2006 Calendar Year Survey
- Various industry contacts, including Fosters, Owens-Illinois and Aluminium Can Group
2 Definitions

This study examines the consumption, recovery and recycling of three beverage packaging materials. The terms recycling and recovery are often interchanged and confused.

The definitions provided below are the meanings of the terms as they appear in this report.

<table>
<thead>
<tr>
<th>Away from Home</th>
<th>Packaging from non-residential sources. Includes pubs, sport venues, offices and retail sites.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption</td>
<td>Total use of packaging by Australian consumers. Includes locally made and filled packaging and imported empty packaging. Does not include locally made packaging which is exported for use or imported filled packaging.</td>
</tr>
<tr>
<td>Recovery</td>
<td>The amount of packaging collected for recycling.</td>
</tr>
<tr>
<td>Recycling</td>
<td>The amount of packaging that is collected, sorted and reprocessed for the manufacture of new product.</td>
</tr>
<tr>
<td>Residential</td>
<td>Packaging from household sources.</td>
</tr>
</tbody>
</table>
3 Project background

The Packaging Stewardship Forum of the Australian Food and Grocery Council (PSF) engaged Hyder Consulting to complete a quantification study of Australian post-consumer beverage packaging consumption, recovery and recycling.

The objectives of the study are to collate the best available information on Australian post-consumer beverage packaging (all split by the three material types listed below):

- Consumption tonnages split by residential and non-residential / away from home (AfH)
- Recovery tonnages split by residential and non-residential / away from home (AfH)
- Recycling tonnages split by residential and non-residential / away from home (AfH).
- Recovery rates split by residential and non-residential / away from home (AfH).
- Recycling rates split by residential and non-residential / away from home (AfH).

The PSF requested the quantification of three types of beverage packaging:

1. Glass
2. Aluminium
3. PET

Methodology

The project objectives were reached using the following methodology.

The post-consumer beverage packaging consumption quantity has been determined by contacting manufacturers and representatives of beverage packaging and by the review of the following pre-existing datasets:

- PACIA: 2006 Calendar Year Survey
- Various industry contacts, including Fosters, Owens-Illinois and Aluminium Can Group

Away from home consumption has been calculated simply by subtracting the residential consumption from the known overall consumption.
Overall beverage packaging consumption includes imported empty containers, but does not include filled imports as these could not be easily quantified. It is considered that the exclusion of filled imports is unlikely to significantly impact on the data presented in this report as the quantities of filled glass (e.g. wine), aluminium (e.g. beer) and PET (e.g. water) containers are not large in scale when compared with domestic production of the same filled containers.

The beverage packaging recovery quantity has been determined through a review of recycling quantities and the 'Used Packaging Materials NEPM' for residential recovery and based on industry knowledge and advice for AfH recovery.

The recovery rates for each of the materials have been calculated from beverage packaging consumption and recovery tonnes. The losses from consumption to recovery are explained in the anecdotal reporting section.

The post-consumer beverage packaging recycling quantity has been determined through a review of the 'Used Packaging Materials NEPM' for residential recycling quantity and estimates based on industry advice for non-residential recycling quantity.

The recycling rates for each of the materials have been calculated from post-consumer beverage packaging consumption and recycling.

Where information was not available for the 2006 – 2007 financial year, it has been clearly noted and the date range of the data used also clearly identified. The information source of all data is noted in the data sources section (Section 4).
4 Data sources

4.1 Introduction
The data sources reviewed for this project are:

- PACIA: 2006 Calendar Year Survey
- Various industry contacts, including Fosters, Owens-Illinois and Aluminium Can Group

Of the data sources, the NEPM: Used Packaging Materials 2006 – 2007 Annual Report was utilised for all three beverage packaging types.

The other data sources were used exclusively for one beverage packaging type as detailed in Sections 4.2, 4.3 and 4.4.

4.1.1 NEPM

The NEPM Annual Report provided collated local council residential kerbside and drop-off recycling information for each State and Territory. The data provided in the NEPM Annual Report is as follows:

- **a** Tonnes of glass containers, aluminium cans and PET containers collected via kerbside and drop-off systems
- **b** Tonnes of glass containers, aluminium cans and PET containers sold or sent for secondary use including energy recovery from kerbside and drop-off systems
- **c** Tonnes of glass containers, aluminium cans and PET containers disposed to landfill as contamination from kerbside and drop-off systems

Of the three information points above, not all were provided for each state and each system (kerbside and drop-off). Table 4-1 details which information points (a, b, c, or all) are provided for each state and system.
<table>
<thead>
<tr>
<th>State</th>
<th>Glass</th>
<th>Aluminium</th>
<th>PET</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kerbside</td>
<td>Drop-off</td>
<td>Kerbside</td>
</tr>
<tr>
<td>New South Wales</td>
<td>All</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Victoria</td>
<td>All</td>
<td>a</td>
<td>All</td>
</tr>
<tr>
<td>Queensland¹</td>
<td>All</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Western Australia</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>South Australia²</td>
<td>All</td>
<td>-</td>
<td>All</td>
</tr>
<tr>
<td>Tasmania</td>
<td>a</td>
<td>-</td>
<td>a</td>
</tr>
<tr>
<td>ACT³</td>
<td>b</td>
<td>b</td>
<td>b</td>
</tr>
</tbody>
</table>

Notes:
1. Queensland’s drop-off data provides an aggregate number for plastics. As such, a percentage has been assumed for PET in the Queensland residential drop-off system.
2. No drop-off information was supplied for South Australia. Where required, this data has been supplemented using the Zero Waste South Australia Recycling Activity Report.
3. Due to the method of collection in the ACT, the information provided is a combined kerbside and drop-off figure.

4.2 Glass

All glass data has been sourced from the following datasets, reports or contacts:

1. Used Packaging Materials NEPM
4. Industry professionals

NPC

NPC signatories are required to report against relevant key performance indicators (KPIs) each year. This reporting is included in the NPC annual report.

KPI 1: Weight of consumer packaging sold into the Australian market establishes the amount of packaging consumed in Australia. The KPI is broken into packaging material, with glass in a category of its own.

ZWSA

Each year ZWSA undertakes a review of total recycling activity in South Australia. The review covers many types of recyclable materials and includes all packaging recycled as part of the container deposit scheme.

The container deposit data from the 2006 – 2007 review was used to account for SA sourced drop-off material.

Industry

Various industry professionals were contacted to establish key packaging splits such as beverage and non-beverage container splits.

Glass packaging consumption includes imported empty containers, but does not include filled imports as these could not be easily quantified.

4.3 Aluminium

All aluminium data has been sourced from the following contact and report:

1. Australian Can Group (ACG)
2. Used Packaging Materials NEPM

ACG

Malcolm Matthews of the ACG was contacted in order to gather aluminium can data. The ACG was able to provide information for the 2006 calendar year only, 2007 calendar year data is due shortly.

Specifically, the ACG provided data on the number of units consumed in the beverage packaging market, the average weight of an aluminium can and the tonnage of aluminium cans recycled in Australia.

The ACG provided data was the primary data source utilised in this quantification study.

Aluminium can consumption includes imported empty containers and can sheet, but does not include filled imports as these could not be easily quantified.

4.4 PET

All PET data has been sourced from the following datasets, report and industry contacts:

1. PACIA 2006 Calendar Year National Plastics Recycling Survey
2. Used Packaging Materials NEPM
3. Industry professionals
PACIA

The PACIA 2006 Calendar Year Survey database was able to provide the following information:

- Total PET consumption in Australia (tonnes)
- % split of total PET consumption that was packaging and non-packaging
- % split pre and post-consumer PET

Industry

Various industry professionals were contacted to establish key packaging splits such as beverage and non-beverage container splits.

PET packaging consumption includes imported empty containers and preforms, but does not include filled imports as these could not be easily quantified.
5 Results and discussion

The flowcharts provided as Appendix A illustrate the consumption, recovery and recycling volumes and recycling rates for glass, aluminium and PET beverage containers in Australia for the residential and away from home sectors.

5.1 Glass

Table 5-1 presents a summary of glass beverage packaging consumption, recovery and recycling in Australia. The information presented in the table is primarily based on NEPM and NPC data and is for the 2006 – 2007 financial year.

Table 5-1: Glass beverage packaging summary

<table>
<thead>
<tr>
<th></th>
<th>Residential</th>
<th>Away from Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption (tonnes)</td>
<td>589,400</td>
<td>196,467</td>
</tr>
<tr>
<td>Recovery (tonnes)</td>
<td>447,944</td>
<td>43,222</td>
</tr>
<tr>
<td>Recovery rate (%)</td>
<td>Residential</td>
<td>Residential</td>
</tr>
<tr>
<td></td>
<td>76.00%</td>
<td>22.00%</td>
</tr>
<tr>
<td>Recycling (tonnes)</td>
<td>328,017</td>
<td>33,399</td>
</tr>
<tr>
<td>Recycling rate (%)</td>
<td>Residential</td>
<td>Residential</td>
</tr>
<tr>
<td></td>
<td>55.65%</td>
<td>17.00%</td>
</tr>
</tbody>
</table>

Notes:
South Australian drop-off material is not included in the NEPM data. As such, the known container deposit glass recovery for SA has been added to the NEPM data to ensure total market coverage.

Two datasets were reviewed to establish the consumption, recovery and recycling of glass beverage packaging in Australia: NEPM and NPC. The NPC dataset consists almost entirely of VISY provided information.
Review of the data found these sources to be in conflict with each other.

When the VISY data was used with the 12% non-beverage packaging factor and assuming that away from home recycling was similar but not significantly less than that of PET, the residential recycling rate was less than 40%. This recycling rate was considered to be inconsistent when compared with data from kerbside audits showing diversion rates well in excess of this. As such, the NEPM & NPC data was used to establish the consumption, recovery and recycling of glass beverage packaging in Australia.

Anecdotal reporting – Glass recovery

Glass recovery is derived from NEPM data on collection from kerbside and drop-off sites. It also includes an estimated amount of drop-off material in South Australia that is not covered by NEPM data. In total, the residential recovery figure was 447,944 tonnes. Knowing the recycling tonnes for both residential and AFH sources, a similar level of losses was applied to AFH glass recovered material. This makes total glass recovery 491,166 tonnes and the estimated loss from collection, sorting and beneficiation of 129,750 tonnes.

NEPM data, used to quantify the recovery and recycling rates of glass beverage containers, is known to be of varied quality. Hundreds of local governments provide data, with the data provided varying from precise to rough estimates.

The NPC is currently committed to funding several glass recovery improvement projects. The improvement is estimated to be 143,000 tonnes of glass per year. This addresses the estimated 129,750 tonne annual loss from the system as well as a fraction of the current glass stockpile, particularly glass fines.

Anecdotal reporting – Glass recycling

The measurement of glass recycling is highly dependent on where in the system the tonnage is recorded. This is primarily due to the higher levels of loss due to excessive breakage that occurs during collection, sorting and preparing material for reprocessing.

In order to be more precise about the glass recycling rate, more analysis would be required to identify if MRF supplied data is in or out the gate and if it includes material that may subsequently be optically sorted or used in secondary markets.

Similarly there would be a need for greater analysis to identify if the VISY data is measured in or out of their facilities. The discrepancy in glass recycling data shows the importance of minimising losses from consumer to reprocessor.
The exact level of glass recycling losses cannot be quantified but could be tens of thousands of tonnes. This highlights the importance of minimising losses, optical sorting of glass and development of alternative markets for glass fines.

Definitions

The following definition was used in the data analysis:

- Beverage packaging accounts for 88% of all glass packaging manufactured and recycled in Australia (Source: Owens-Illinois)

Assumptions

The following assumptions were made in relation to the available glass beverage packaging data:

- Residential consumption accounted for 75% of all beverage packaging consumption (Source: Beer and wine industry)
- NEPM data with the addition of SA container deposit data accounted for all residential recycling
- Away from home glass recycling is similar to but not significantly less than away from home PET recycling as the venues utilising glass have a higher level of recycling activity

The first assumption that residential consumption accounts for 75% of all beverage packaging consumption was determined through discussion with the beer and wine industry. The beer and wine industries are relatively concentrated with a handful of companies holding a dominant market position. Within these companies analysis has been undertaken on the sales pathways for both beer and wine (supermarkets, bottle shops, events, bar sales). These companies are therefore in a strong position to understand the proportion of glass packaged beer and wine that is likely to be consumed in the residential setting. To relate sales to consumption some assumptions are made about consumer behaviour, for example bar sales are all non-residential, supermarket sales are predominately residential etc. On the basis of this sales / consumption assessment the accuracy of the 75:25 ratio is deemed to have a high level of confidence.

It is also assumed that beverage and non-beverage glass will be recycled at similar rates. Even if the rates are different, the low volume of non-beverage glass means there will be little impact on beverage recycling rates.
5.2 Aluminium

Table 5-2 presents a summary of aluminium can consumption, recovery and recycling in Australia. The information presented in the table is primarily based on ACG provided information and is for the 2006 calendar year.

<table>
<thead>
<tr>
<th>Table 5-2: Aluminium beverage packaging summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption (tonnes)</td>
</tr>
<tr>
<td>Residential</td>
</tr>
<tr>
<td>Away from Home</td>
</tr>
<tr>
<td>Recovery (tonnes)</td>
</tr>
<tr>
<td>Residential</td>
</tr>
<tr>
<td>Away from Home</td>
</tr>
<tr>
<td>Recovery rate (%)</td>
</tr>
<tr>
<td>Residential</td>
</tr>
<tr>
<td>Away from Home</td>
</tr>
<tr>
<td>Recycling (tonnes)</td>
</tr>
<tr>
<td>Residential</td>
</tr>
<tr>
<td>Away from Home</td>
</tr>
<tr>
<td>Recycling rate (%)</td>
</tr>
<tr>
<td>Residential</td>
</tr>
<tr>
<td>Away from Home</td>
</tr>
</tbody>
</table>

The data provided for aluminium beverage packaging consumption is for aluminium cans only. Aluminium cans are considered to cover the majority of the aluminium beverage packaging market and the focus on cans is in line with the National Packaging Covenant which is structured with targets relating to cans rather than overall packaging.

Anecdotal reporting – Aluminium recovery

The NEPM data is known to be of varied quality and in the case of aluminium beverage containers is incomplete.

Unlike other materials, such as glass or paper, aluminium cannot be damaged during collection and goes straight to reprocessing after sorting. The only perceivable loss in aluminium beverage container recycling is through sorting. Sorting is a mechanical process and is known to be highly comprehensive.
However, due to conservative eddy current diversion settings that attempt to avoid false positive sorts, it is estimated that around 2% of material does not get recovered at a sorting facility level.

Anecdotal reporting – Aluminium recycling

The exercise in measuring aluminium beverage packaging consumption, recovery and recycling is more straightforward than for other materials. This is due to the following:

- With the exception of aerosols, almost all aluminium packaging is beverage packaging
- The size of the beverage container is largely uniform in weight
- Beer and soft drink dominate beverage in aluminium packaging

While there will be some supermarket sales that do not result in residential consumption, this will be small and offset by the sales from other sources (e.g. bottle shops) that are consumed at home.

Definitions

The following definition was used in the data analysis:

- Supermarket sales account for 75% of aluminium cans sales in Australia (Source: ACG)

Assumptions

The following assumptions were made in relation to the available aluminium beverage packaging data:

- Supermarket sales accounted for 100% of residential consumption
- Almost 80% of residential kerbside aluminium cans are recycled based on bin audit results and the known overall recycling rate
- 100% of dropped-off residential aluminium cans were recycled
5.3 PET

Table 5-3 presents a summary of PET beverage packaging consumption, recovery and recycling in Australia. The information presented in the table is primarily based on PACIA data for the 2006 calendar year and NEPM data for the 2006 – 2007 financial year.

Table 5-3: PET beverage packaging summary

<table>
<thead>
<tr>
<th></th>
<th>Residential</th>
<th>Away from Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption (tonnes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>48,475</td>
<td></td>
</tr>
<tr>
<td>Away from Home</td>
<td>39,662</td>
<td></td>
</tr>
<tr>
<td>Recovery (tonnes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>36,409</td>
<td></td>
</tr>
<tr>
<td>Away from Home</td>
<td>7,261</td>
<td></td>
</tr>
<tr>
<td>Recovery rate (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>75.11%</td>
<td></td>
</tr>
<tr>
<td>Away from Home</td>
<td>18.30%</td>
<td></td>
</tr>
<tr>
<td>Recycling (tonnes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>33,662</td>
<td></td>
</tr>
<tr>
<td>Away from Home</td>
<td>6,915</td>
<td></td>
</tr>
<tr>
<td>Recycling rate (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>69.44%</td>
<td></td>
</tr>
<tr>
<td>Away from Home</td>
<td>17.43%</td>
<td></td>
</tr>
</tbody>
</table>

Anecdotal reporting – PET recovery

The residential recycling figure provided in the Table 5-3 above is the NEPM PET collection data less AFH collection and non-beverage packaging.

To determine the recovery figure the following factors were applied to the recycling figure:

- 4% was applied to account for SA drop-off material that is excluded from all NEPM data
- 4% was applied to account for sorting and collection losses
A collection/sorting loss of 5% was also applied to the total AfH recycling tonnes to represent the recovery tonnes.

Anecdotal reporting – PET recycling

PET is used predominantly for beverage packaging, but is increasingly used in non-beverage packaging applications.

In relation to beverage packaging it is a dominant packaging medium for soft drinks, water and fruit juice. It has a large presence in AfH venues, but it also has major market outlets at residential consumption level where 1.5 litre and 2 litre packs dominate.

The weight of containers does not increase at the same rate as the packaging capacity – i.e. a 2 litre pack does not weigh four times 500mL packs (see Table 5-4). This means that while AfH may represent 25% of PET beverage packaging units, the weights of AfH containers is likely to be close to 45% of total PET beverage packaging.

Table 5-4: PET beverage packaging weight summary

<table>
<thead>
<tr>
<th>Bottle size</th>
<th>Bottle weight – single unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 L</td>
<td>55 g</td>
</tr>
<tr>
<td>1.25 L</td>
<td>40 g</td>
</tr>
<tr>
<td>600 mL</td>
<td>30 g</td>
</tr>
<tr>
<td>450 mL</td>
<td>30 g</td>
</tr>
</tbody>
</table>

Notes: The bottle weight is based on empty PET bottles with no label, lid or lid collar.

Definitions

The following definition was used in the data analysis:

- 5% of the PET beverage packaging market is filled imports (Source: NPC 2005 – 2006 Annual Report)

Assumptions

The following assumptions were made in relation to the available PET beverage packaging data:

- 90% of post-consumer PET is beverage packaging
- Residential consumption accounts for 55% by weight of all PET beverage packaging consumption (equivalent to 75% by unit numbers and the mix of bottle sizes in supermarkets and AfH outlets).
Appendix A

Beverage Packaging Flowcharts
Glass Packaging Flow Chart

Export - Full

Glass Packaging Manufacturing

Import - Empty

Import - Full

Total Glass Packaging Consumption
893 031 tonnes

Consumption – Non-Beverage
107 164 tonnes

Consumption – Beverage
785 867 tonnes

Away from Home Consumption (Beverage)
196 467 tonnes

Residential Consumption (Beverage)
589 400 tonnes

Away from Home Recovery (Beverage)
43 222 tonnes
22.00 %

Residential Recovery (Beverage)
447 944 tonnes
76.00 %

Away from Home Recycling (Beverage)
33 399 tonnes
17.00 %

Residential Recycling (Beverage)
328 017 tonnes
55.65 %
Aluminium Packaging Flow Chart

Aluminium Beverage Packaging Consumption
48 791 tonnes

Away from Home Consumption (Beverage)
12 198 tonnes

Away from Home Recovery (Beverage)
3 882 tonnes
31.83%

Away from Home Recycling (Beverage)
3 806 tonnes
31.21%

Residential Consumption (Beverage)
36 593 tonnes

Residential Recovery (Beverage)
31 104 tonnes
85.00%

Residential Recycling (Beverage)
30 494 tonnes
83.20%